

Figure 1:

1/1
GGT ACC ACT TCT CTC AAT CGA ACT TTC TAA ACA ATG GCT TCT AAA CCT TTC TTG TCT CTT
M A S K P F L S L

61/10
CTT TCT TTG TCT TTG CTT TTG TTC ACC TCT ACT AGT TTG GCT GAC CTG TAC TTC ATT TTG
L S L S L L L F T S T S L A D L Y F I L

121/30
GAC AAA TCA GGA AGT GTG CTG CAC CAC TGG AAT GAA ATC TAT TAC TTT GTG GAA CAG TTG
D K S G S V L H H W N E I Y Y F V E Q L

181/50
GCT CAC AAA TTC ATC AGC CCA CAG TTG AGA ATG TCC TTT ATT GTT TTC TCC ACC CGA GGA
A H K F I S P Q L R M S F I V F S T R G

241/70
ACA ACC TTA ATG AAA CTG ACA GAA GAC AGA GAA CAA ATC CGT CAA GGC CTA GAA GAA CTC
T T L M K L T E D R E Q I R Q G L E E L

301/90
CAG AAA GTT CTG CCA GGA GGA GAC ACT TAC ATG CAT GAA GGA TTT GAA AGG GCC AGT GAG
Q K V L P G G D T Y M H E G F E R A S E

361/110
CAG ATT TAT TAT GAA AAC AGA CAA GGG TAC AGG ACA GCC AGC GTC ATC ATT GCT TTG ACT
Q I Y Y E N R Q G Y R T A S V I I A L T

421/130
GAT GGA GAA CTC CAT GAA GAT CTC TTT TTC TAT TCA GAG AGG GAG GCT AAT AGG TCT CGA
D G E L H E D L F F Y S E R E A N R S R

481/150
GAT CTT GGT GCA ATT GTT TAC TGT GTT GGT GTG AAA GAT TTC AAT GAG ACA CAG CTG GCC
D L G A I V Y C V G V K D F N E T Q L A

541/170
CGG ATT GCG GAC AGT AAG GAT CAT GTG TTT CCC GTG AAT GAC GGC TTT CAG GCT CTG CAA
R I A D S K D H V F P V N D G F Q A L Q

601/190
GGC ATC ATC CAC TCA ATT TTG AGC TCT GCT TCC CCA ACC AGC CCT AAG GTC TTC CCT CTC
G I I H S I L S S A S P T S P K V F P L

661/210
AGC CTT GAC AGC ACC CCT CAA GAT GGT AAT GTT GTC GTT GCT TGC CTT GTC CAG GGT TTC
S L D S T P Q D G N V V V A C L V Q G F

721/230
TTC CCT CAG GAG CCA CTC TCT GTT ACC TGG TCT GAA TCT GGA CAG AAT GTT ACC GCC AGA
F P Q E P L S V T W S E S G Q N V T A R

781/250
AAC TTC CCA CCT AGC CAG GAT GCC TCC GGT GAC CTC TAC ACC ACC AGC TCT CAG CTC ACC

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N F P P S Q D A S G D L Y T T S S Q L T

841/270

CTT CCA GCC ACC CAG TGC CCA GAT GGT AAG TCC GTT ACC TGC CAT GTT AAG CAC TAC ACC
L P A T Q C P D G K S V T C H V K H Y T

901/290

AAC TCC AGC CAG GAT GTT ACT GTT CCA TGC CGT GTT CCA CCA CCT CCA CCA TGC TGC CAC
N S S Q D V T V P C R V P P P P P C C H

961/310

CCA CGT CTC TCT CTT CAC CGT CCT GCC CTT GAG GAC TTG CTC TTG GGT TCT GAA GCT AAC
P R L S L H R P A L E D L L L G S E A N

1021/330

CTC ACC TGC ACC CTC ACC GGT CTC AGA GAT GCC TCT GGT GCC ACC TTC ACC TGG ACC CCA
L T C T L T G L R D A S G A T F T W T P

1081/350

AGC TCT GGT AAG AGC GCT GTT CAA GGA CCA CCT GAG CGT GAC CTC TGT GGA TGC TAC TCT
S S G K S A V Q G P P E R D L C G C Y S

1141/370

GTT AGC TCT GTT CTT CCT GGT TGT GCC CAG CCT TGG AAC CAC GGT GAG ACC TTC ACC TGC
V S S V L P G C A Q P W N H G E T F T C

1201/390

ACT GCT GCC CAC CCA GAG TTG AAG ACC CCA CTT ACC GCC AAC ATC ACC AAG TCC GGA AAC
T A A H P E L K T P L T A N I T K S G N

1261/410

ACC TTC CGT CCC GAG GTC CAC CTC TTG CCA CCA CCA TCT GAG GAG CTT GCC CTC AAT GAG
T F R P E V H L L P P P S E E L A L N E

1321/430

CTT GTT ACC CTC ACC TGC CTT GCT CGT GGA TTC AGC CCA AAG GAT GTT CTT GTT AGG TGG
L V T L T C L A R G F S P K D V L V R W

1381/450

CTT CAG GGA TCT CAG GAG CTT CCA CGT GAG AAG TAC CTC ACT TGG GCT TCC CGT CAG GAG
L Q G S Q E L P R E K Y L T W A S R Q E

1441/470

CCA AGC CAG GGA ACT ACC ACC TAC GCT GTT ACC AGC ATC CTT CGT GTT GCT GCT GAG GAC
P S Q G T T T Y A V T S I L R V A A E D

1501/490

TGG AAG AAG GGT GAG ACC TTC TCC TGC ATG GTT GGT CAC GAG GCC CTT CCA CTT GCC TTC
W K K G E T F S C M V G H E A L P L A F

1561/510

ACC CAG AAG ACC ATT GAT CGT TTG GCT GGA AAG CCA ACC CAC ATC AAT GTT TCT GTT GTC
T Q K T I D R L A G K P T H I N V S V V

1621/530

1650/538

ATG GCT GAG GCT GAT GGA ACC TGC TAC TAA

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Figure 2. pGPTV-kan-ocs-ATR-IgA2:

Bgl II

1 CTGGCCGGCGCCAGATCTGGGGAACCTGTGGTTGGCATGCACATACAAATGGACGAACGGATAAACCTTTTCACGCCCTT
81 TTAAATATCCGATTATTCTAATAAACGCTCTTTTCTCTTAGGTTTACCCGCCAATATATCCTGTCAAACACTGATAGTTT
161 AAATGAAGGCGGGAAACGACAATCTGATCATGAGCGGAGAATTAAGGGAGTCACGTTATGACCCCGCCGATGACGCGGG

EcoR I

241 ACAAGCCGTTTTACGTTTGGAACTGACAGAACCGCAACGTTGAAGGAGCCACTCAGCCGATCTGAATTCAGTCTTTAAT
321 GAGATATGCGAGACGCCTATGATCGCATGATATTTGCTTTCAATTCTGTTGTGCACGTTGTAAAAACCTGAGCATGTGT
401 AGCTCAGATCCTTACCGCCGGTTTCGGTTTCAATTAATGAATATATCACCCTTACTATCGTATTTTTATGAATAATATT
481 CTCCGTTCAATTTACTGATTGTACCCTACTACTTATATGTACAATATTAATGAAAACAATATATTGTGCTGAATAGGT

Sac I Asc I

561 TTATAGCGACATCTATGATAGAGCGCCACAATAACAAACAATTGCGTTTTATTATTACAAATCCAATTTTGAGCTCGGCG
641 CGCCAGCTGGACATCATGTTGGATATGAAACAACCTATTATTTATCTACATGTTTTAGATGTTATCTGATTATTTTTATAC
721 GTAGTCTTCTATTGATGAGGAGTCTAAGGCTATAGAATTATATATCTAAATGATTAATATATATATTATTAATAATTAAC
801 AATAATTAATATATTATAATTTATATATATATATTTTATATTATTATAATAATATTCTTACAAATATAATTATTATATTC
881 GACGGTATCGGGGCAATTGTATTCGACGGTATCGCGATAAGCTCGCGGATCCCTGAAAGCGACGTTGGATGTAAACATCT
961 ACAAATTGCCTTTTCTTATCGACCATGTACGTAAGCGCTTACGTTTTTGGTGGACCCTTGAGGAACTGGTAGCTGTTGT
1041 GGGCCTGTGGTCTCAAGATGGATCATTAAATTTCCACCTTCACCTACGATGGGGGGCATCGCACCGGTGAGTAATATTGTA
1121 CGGCTAAGAGCGAATTTGGCCTGTAGGATCCCTGAAAGCGACGTTGGATGTAAACATCTACAAATTGCCTTTTCTTATCG
1201 ACCATGTACGTAAGCGCTTACGTTTTTGGTGGACCCTTGAGGAACTGGTAGCTGTTGTGGGCTGTGGTCTCAAGATGG
1281 ATCATTAATTTCCACCTTCACCTACGATGGGGGGCATCGCACCGGTGAGTAATATTGTACGGCTAAGAGCGAATTTGGCC
1361 TGTAGGATCCCTGAAAGCGACGTTGGATGTAAACATCTACAAATTGCCTTTTCTTATCGACCATGTACGTAAGCGCTTAC
1441 GTTTTTGGTGGACCCTTGAGGAACTGGTAGCTGTTGTGGGCTGTGGTCTCAAGATGGATCATTAAATTTCCACCTTCAC
1521 CTACGATGGGGGGCATCGCACCGGTGAGTAATATTGTACGGCTAAGAGCGAATTTGGCCTGTAGGATCCGCGAGCTGGT
1601 AATCCCATTTGCTTTTGAAGCAGCTCAACATTGATCTCTTTCTCGATCGAGGGAGATTTTTCAAATCAGTGCAGCAAGACGT
1681 GACGTAAGTATCCGAGTCAGTTTTTATTTTTCTACTAATTTGGTCGTTTATTTCGGCGTGTAGGACATGGCAACCGGGCC
1761 TGAATTTTCGCGGTATTCTGTTTCTATTCCAACCTTTTCTTGATCCGAGCCATTAACGACTTTTGAATAGATACGCTGA
1841 CACGCCAAGCCTCGCTAGTCAAAAGTGACCAAACAACGCTTTACAGCAAGAACGGAATGCGCGTGACGCTCGCGGTGAC
1921 GCCATTTTCGCTTTTTCAGAAATGGATAAATAGCCTTGCTTCTTATTATATCTTCCCTTAATTAAGGTACCACTTCTCTCA
2001 ATCCAACCTTTCTAAACAATGGCTTCTAAACCTTTCTTGTCTCTTCTTTCTTTGTCTTTGCTTTTGTTCACCTCTACTAGT
2081 TTGGCTGACCTGTACTTCATTTTGGACAAATCAGGAAGTGTGCTGCACCACTGGAATGAAATCTATTACTTTGTGGAACA
2161 GTTGGCTCACAAATTCATCAGCCCACAGTTGAGAATGTCCTTTATTGTTTTCTCCACCCGAGGAACAACCTTAATGAAAC
2241 TGACAGAAGACAGAGAACAATCCGTCAAGGCCAGAAAGTCTGCAAGAGGAGACACTTACATGCAT
2321 GAAGGATTTGAAAGGGCCAGTGAGCAGATTTATTATGAAAACAGACAAGGGTACAGGACAGCCAGCGTCATCATTTGCTTT
2401 GACTGATGGAGAACTCCATGAAGATCTCTTTTTCTATTTCAGAGAGGGAGGCTAATAGGTCTCGAGATCTTGGTGCAATTG
2481 TTTACTGTGTTGGTGTGAAAGATTTCAATGAGACACAGCTGGCCCCGATTGCGGACAGTAAGGATCATGTGTTTCCCGTG
2561 AATGACGGCTTTGAGGCTCTGCAAGGCATCATCACTCAATTTGAGCTCTGCTTCCCCAACAGCCCTAAGGTCTTCCC
2641 TCTCAGCCTTGACAGCACCCCTCAAGATGGTAATGTTGTCGTTGCTTGCTTGTCCAGGGTTTTCTTCCCTCAGGAGCCAC

2721 TCTCTGTTACCTGGTCTGAATCTGGACAGAATGTTACCGCCAGAACTTCCCACCTAGCCAGGATGCCTCCGGTGACCTC
2801 TACACCACCAGCTCTCAGCTCACCTTCCAGCCACCCAGTGCCAGATGGTAAGTCCGTTACCTGCCATGTTAAGCACTA
2881 CACCAACTCCAGCCAGGATGTTACTGTTCCATGCCGTGTTCCACCACCTCCACCATGCTGCCACCCACGTCTCTCTCTC
2961 ACCGTCCTGCCCTTGAGGACTTGCTCTTGGGTTCTGAAGCTAACCTCACCTGCACCCCTACCGGTCTCAGAGATGCCTCT
3041 GGTGCCACCTTACCTGGACCCCAAGCTCTGGTAAGAGCGCTGTTCAAGGACCACCTGAGCGTGACCTCTGTGGATGCTA
3121 CTCTGTTAGCTCTGTTCTTCTGGTTGTGCCCAGCCTTGGAAACCAGGTGAGACCTTACCTGCACTGCTGCCCACCCAG
3201 AGTTGAAGACCCCACTTACCGCCAACATCACCAAGTCCGGAACACCTTCCGTCCTCCGAGGTCCACCTCTTGCCACCACCA
3281 TCTGAGGAGCTTGCCCTCAATGAGCTTGTTACCTCACCTGCCTTGCTCGTGGATTGAGCCCAAAGGATGTTCTTGTTAG
3361 GTGGCTTCAGGGATCTCAGGAGCTTCCACGTGAGAAGTACCTCACTTGGGCTTCCCGTCAGGAGCCAAGCCAGGGAATA
3441 CCACCTACGCTGTTACCAGCATCCTTCGTGTTGCTGCTGAGGACTGGAAGAAGGGTGAGACCTTCTCCTGCATGGTTGGT
3521 CACGAGGCCCTTCCACTTGCCTTACCCAGAAGACCATTGATCGTTTGGCTGGAAAGCCAACCCACATCAATGTTTCTGT
3601 TGTGATGGCTGAGGCTGATGGAACCTGCTACTAAGATCTGTGAATTCCTGCAGCCCGGGGGATCCACTAGTTCTAGCTAG
3681 AGCGGCCGCCACCGCGGTGGCGAATTAACAGAGGTGGATGGACAGACCCGTTCTTACACCGGACTGGGCGCGGGATAGGA
3761 TATTGAGATTGGGATGGGATTGAGCTTAAAGCCGGCGCTGAGACCATGCTCAAGGTAGGCAATGTCCTCAGCGTCGAGCC
3841 CGGCATCTATGTCGAGGGCATTGGTGGAGCGCGCTTCGGGGATACCGTGCTTGTAAGTGAAGACCGGATATGAGGCCCTCA
3921 CTCCGCTTGATCTTGGAAGATATTTGACGCATTTATTAGTATGTGTTAATTTTCATTTGCAGTGCAGTATTTTCTATT
4001 CGATCTTTATGTAATTCGTTACAATTAATAAATATTCAAATCAGATTATTGACTGTCAATTTGTATCAAATCGTGTTTAAT
4081 GGATATTTTTATTATAATATTGATGATAATTCACCTGGCCGTCGTTTTACAACGTCGTGACTGGGAAAACCTGGCGTTAC
4161 CCAACTTAATCGCCTTGACGACATCCCCCTTTCGCCAGCTGGCGCGCCAAGCTTCACGCTGCCGCAAGCACTCAGGGCG
4241 CAAGGGCTGCTAAAGGAAGCGGAACACGTAGAAAGCCAGTCCGCAGAAACGGTGCTGACCCCGGATGAATGTCAGCTACT
4321 GGCTATCTGGACAAGGGAAAACGCAAGCGCAAAGAGAAAGCAGGTAGCTTGCAGTGGGCTTACATGGCGATAGCTAGACT
4401 GGGCGGTTTTATGGACAGCAAGCGAACCAGGAAATGGCCAGCTGGGCGCCCTCTGGTAAGGTTGGGAAGCCCTGCAAAGTA
4481 AACTGGATGGCTTTCTTGCCGCCAAGGATCTGATGGCGCAGGGGATCAAGATCATGAGCGGAGAATTAAGGGAGTCACGT
4561 TATGACCCCGCCGATGACGCGGGACAAGCCGTTTTACGTTTGGAAGTACAGAGAACCGCAACGTTGAAGGAGCCACTCAG
4641 CCGCGGGTTTTCTGGAGTTTAATGAGCTAAGCACATACGTGAGAAACCATTATTGCGCGTTCAAAGTGCCTAAGGTAC
4721 TATCAGCTAGCAAATATTTCTGTCAAAAATGCTCCACTGACGTTCCATAAATTTCCCTCGGTATCCAATTAGAGTCTCA
4801 TATCACTCTCAATCCAGATCTGGATCGTTTTGCGATGATTGAACAAGATGGATTGCACGCAGGTTCTCCGGCCGCTTGGG
4881 TGGAGAGGCTATTCCGGCTATGACTGGGCACAACAGACAATCGGCTGCTCTGATGCCGCCGTGTTCCGGCTGTGACGCGAG
4961 GGGCGCCCGGTTCTTTTTGTCAAGACCGACCTGTCCGGTGCCCTGAATGAAGTGCAGGACGAGGCAGCGCGGCTATCGTG
5041 GCTGGCCACGACGGGCGTTCCCTTGCGCAGCTGTGCTCGACGTTGTCACTGAAGCGGGAAGGGACTGGCTGCTATTGGGCG
5121 AAGTGCCGGGGCAGGATCTCCTGTATCTCACCTTGCTCCTGCGGAGAAAGTATCCATCATGGCTGATGCAATGCGGCGG
5201 CTGCATACGCTTGATCCGGCTACCTGCCCATTGACACCAAGCGAAACATCGCATCGAGCGAGCACGTAAGTCCGGATGGA
5281 AGCCGGTCTTGTCGATCAGGATGATCTGGACGAAGAGCATCAGGGGCTCGCGCCAGCCGAAGTGTTCGCCAGGCTCAAGG
5361 CGCGCATGCCCCGACGGCGATGATCTCGTCGTGACCCATGGCGATGCTGCTTGCCGAATATCATGGTGGAAAATGGCCGC
5441 TTTTCTGGATTGATGACTGTGGCCGGCTGGGTGTGGCGGACCGCTATCAGGACATAGCGTTGGCTACCCGTGATATTGC
5521 TGAAGAGCTTGGCGGCAATGGGCTGACCGCTTCTCGTGCTTTACGGTATCGCCGCTCCCGATTGCGAGCGCATCGCCT
5601 TCTATCGCCTTCTTGACGAGTTCTTCTGAGCGGGACTCTGAGGATCCCCGATGAGCTAAGCTAGCTATATCATCAATTT
5681 ATGTATTACATAATATCGCACTCAGTCTTTCATCTACGGCAATGTACCAGCTGATATAATCAGTTATTGAAATATTTT

5761 TGAATTTAACTTGCATCAATAAATTTATGTTTTTGCTTGGACTATAATACCTGACTTGTTATTTTATCAATAAATATTT
5841 AAACATATTTCTTTCAAGATGGGAATTAATTCAGTGGCCGTCGTTTTACAACGTCGTGACTGGGAAAACCTGGCGTTA
5921 CCCAACTTAATCGCCTTGACGACATCCCCCTTTGCCAGCTGGCGTAATAGCGAAGAGGCCCGACCGATCGCCCTTCC
6001 CAACAGTTGCGCAGCCTGAATGGCGCCCGCTCCTTTGCTTTCTTCCCTTCCTTTCTCGCCACGTTGCGCCGGCTTCCCC
6081 GTCAAGCTCTAAATCGCGGGCTCCCTTTAGGGTTCCGATTTAGTGCTTTACGGCACCTCGACCCCAAAAACTTGATTG
6161 GGTGATGGTTCACGTAGTGGGCCATCGCCCTGATAGACGGTTTTTCGCCCTTTGACGTTGGAGTCCACGTTCTTTAATAG
6241 TGGACTCTTGTTCCAACTGGAACAACACTCAACCCTATCTCGGGCTATTCTTTTGATTTATAAGGGATTTTGCCGATTT
6321 CGGAACCACCATCAAACAGGATTTTCGCCTGCTGGGGCAAACCAGCGTGGACCGCTTGCTGCAACTCTCTCAGGGCCAGG
6401 CGGTGAAGGGCAATCAGCTGTTGCCCGTCTCACTGGTGAAAAGAAAAACCACCCAGTACATTAAAAACGTCCGCAATGT
6481 GTTATTAAGTTGTCTAAGCGTCAATTGTTTACACCACAATATATCCTGCCACCAGCCAGCCAACAGCTCCCCGACCGGC
6561 AGCTCGGCACAAAATCACCCTCGATACAGGCAGCCCATCAG

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Figure 3. pGPTV-hpt-ocs-35SJ/SC

1 CTGATGGGCTGCCTGTATCGAGTGGTGATTTTGTGCCGAGCTGCCGGTCGGGGAGCTGTTGGCTGGCTGGTGGCAGGATA
81 TATTGTGGTGTAACAAATTGACGCTTAGACAACCTTAATAACACATTGCCGGACGTTTTTAATGTAAGTGGGGTGGTTTTTC
161 TTTTCACCACTGAGACGGGCAACAGCTGATTGCCCTTACCAGCTGGCCCTGAGAGAGTTGCAGCAAGCGGTCCACGCTG
241 GTTTGCCCCAGCAGGCGGAAAATCCTGTTTGATGGTGGTTCCGAAATCGGCAAAATCCCTTATAAATCAAAAGAATAGCCC
321 GAGATAGGGTTGAGTGTGTTTCCAGTTTGGAAACAAGAGTCCACTATTAAAGAACGTGGACTCCAACGTCAAAGGGCGAAA
401 AACCGTCTATCAGGGCGATGGCCCACTACGTGAACCATCACCCAAATCAAGTTTTTTGGGGTTCGAGGTGCCGTAAAGCAC
481 TAAATCGGAACCTTAAAGGGAGCCCCGATTTAGAGCTTGACGGGAAAGCCGGCGAACGTGGCGAGAAAGGAAGGGAAG
561 AAAGCGAAAGGAGCGGGCGCCATTGAGGCTGCGCAACTGTTGGGAAGGGCGATCGGTGCGGGCTCTTCGCTATTACGCC
641 AGCTGGCGAAAGGGGGATGTGCTGCAAGGCGATTAAGTTGGGTAACGCCAGGGTTTTCCAGTCACGACGTTGTAACG
721 ACGGCCAGTGAATTAATTCCCATCTTGAAAGAAATATAGTTTAAATATTTATTGATAAAATAACAAGTCAGGTATTATAG
801 TCCAAGCAAAAACATAAATTTATTGATGCAAGTTTAAATTCAGAAATATTTCAATAACTGATTATATCAGCTGGTACATT
881 GCCGTAGATGAAAGACTGAGTGCATATTTATGTGTAATACATAAATTGATGATATAGCTAGCTTAGCTCATCGGGGGATC
961 CCGGTGCGCATCTACTCTATTCCTTTGCCCTCGGACGAGTGCTGGGGCGTCGGTTTTCCACTATCGGCGAGTACTTCTACA
1041 CAGCCATCGGTCCAGACGGCCGCGCTTCTGCGGGCGATTTGTGTACGCCCGACAGTCCCGGCTCCGGATCGGACGATTGC
1121 GTCGCATCGACCCTGCGCCCAAGCTGCATCATCGAAATTGCCGTCAACCAAGCTCTGATAGAGTTGGTCAAGACCAATGC
1201 GGAGCATATACGCCCGGAGCCGCGGCGATCCTGCAAGCTCCGGATGCCTCCGCTCGAAGTAGCGCGTCTGCTGCTCCATA
1281 CAAGCCAACCACGGCCTCCAGAAGAAGATGTTGGCGACCTCGTATTGGGAATCCCCGAACATCGCCTCGCTCCAGTCAAT
1361 GACCGCTGTTATGCGGCCATTGTCCGTGAGGACATTGTTGGAGCCGAAATCCGCGTGCACGAGGTGCCGGACTTCGGGGC
1441 AGTCTCGGCCCAAAGCATCAGCTCATCGAGAGCTGCGCGACGGACGCACTGACGGTGTGCTCCATCACAGTTTGCCAG
1521 TGATACACATGGGGATCAGCAATCGCGCATATGAAATCACGCCATGTAGTGTATTGACCGATTCTTGCGGTCCGAATGG
1601 GCCGAACCCGCTCGTCTGGCTAAGATCGGCCGACGCGATCGCATCCATGGCCTCCGCGACCGGTGCAGAACAGCGGGCA
1681 GTTCGGTTTTCAGGCAGGTCTTGCAACGTGACACCCTGTGCACGGCGGGAGATGCAATAGGTGAGGCTCTCGCTGAATGCC
1761 CCAATGTCAAGCACTTCCGGAATCGGGAGCGCGGCCGATGCAAAGTGCCGATAAACATAACGATCTTTGTAGAAACCATC
1841 GGCGCAGCTATTTACCCGAGGACATATCCACGCCCTCTACATCGAAGCTGAAAGCACGAGATTCTTCGCCCTCCGAGA
1921 GCTGCATCAGGTGCGAGACGCTGTGCAACTTTTCGATCAGAACTTCTCGACAGACGTGCGGGTGAAGTTCAGGCTTTTTTC
2001 ATATCTTATTGCCCCCTAGAGTCGAGATCTGGATTGAGAGTGAATATGAGACTCTAATTGGATACCGAGGGGAATTTAT
2081 GGAACGTCAGTGGAGCATTTTTGACAAGAAATATTTGCTAGCTGATAGTACCTTAGGCGACTTTTGAACGCGCAATAAT
2161 GGTTCGTGACGTATGTGCTTAGCTCATTAACCTCCAGAAACCCGCGGTGAGTGGCTCCTTCAACGTTGCGGTTCTGTCA
2241 GTTCCAAACGTAAACCGCTTGTCCCGCTCATCGCGGGGGTCAACGTGACTCCCTTAATTCTCCGCTCATGATCTT
2321 GATCCCCTGCGCCATCAGATCCTTGGCGGCAAGAAAGCCATCCAGTTTACTTTGCAGGGCTTCCCAACCTTACCAGAGGG
2401 CGCCCCAGCTGGCAATTCCGGTTCGCTTGTGTCATATAAACCGCCAGTCTAGCTATCGCCATGTAAGCCCACTGCAAG
2481 CTACCTGCTTTCTCTTTCGCTTTCGCTTTTCCCTTGTCCAGATAGCCAGTAGCTGACATTATCCGGGGTCAGCACCGTT
2561 TCTGCGGACTGGCTTCTACGTGTTCCGCTTCTTTTAGCAGCCCTTGCGCCCTGAGTGTGCGGCAGCGTGAAGCTTGG
2641 CGCGCCAGCTGGACATCATGTTGGATATGAAACAACCTATTATTTATCTACATGTTTTAGATGTTATCTGATTATTTTTAT
2721 ACGTAGTCTTCTATTGATGAGGAGTCTAAGGCTATAGAATTATATATCTAAATGATTAATATATATATTATTAATAATTA
2801 ACAATAATTAATATATTATAAATTTATATATATATATTTTATATTATTATAATAATATTCTTACAAATATAATTATTATAT

2881 TCGACGGTATCGGGGCAATTGATTCCCGATCCTATCTGTCACCTTCATCAAAAGGACAGTAGAAAAGGAAGGTGGCACCTA
2961 CAAATGCCATCATTGCGATAAAGGAAAGGCTATCATTCAAGATGCCTCTGCCGACAGTGGTCCCAAAGATGGACCCCCAC
3041 CCACGAGGAGCATCGTGGAAGAAAGACGTTCCAACCACGTCTTCAAAGCAAGTGGATTGATGTGATATCTCCACTGAC
3121 GTAAGGGATGACGCACAATCCCACTATCCTTCGCAAGACCCTTCCTCTATATAAGGAAGTTCATTTCAATTTGGAGAGGAC
3201 ACGCTGAAATCACCAGTCTCTCTCTACAAGGTACCATGGTGTCTTTCGTGCTCACCTGCCTGCTGGCGGTCTTCCCAGCC
3281 ATCTCCACGAAGAGTCCCATATTTGGTCCCGAGGAGGTGAATAGTGTGGAAGGTAACCTCAGTGTCCATCACGTGCTACTA
3361 CCCACCCACCTCTGTCAACCCGGCACACCCGGAAGTACTGGTGCCGGCAGGGAGCTAGAGGTGGCTGCATAACCCTCATCT
3441 CCTCGGAGGGCTACGTCTCCAGCAAATATGCAGGCAGGGCTAACCTCACCAACTTCCCGGAGAACGGCACATTTGTGGTG
3521 AACATTGCCCAGCTGAGCCAGGATGACTCCGGGCGCTACAAGTGTGGCCTGGGCATCAATAGCCGAGGCCTGTCTTTGA
3601 TGTCAGCCTGGAGGTGAGCCAGGGTCTGGGCTCTAAATGACACTAAAGTCTACACAGTGGACCTGGGCAGAACGGTGA
3681 CCATCAACTGCCCTTTCAAGACTGAGAATGCTCAAAAGAGGAAGTCTTGTACAAGCAGATAGGCCTGTACCCTGTGCTG
3761 GTCATCGACTCCAGTGGTTATGTGAATCCCAACTATACAGGAAGAATACGCCTTGATATTCAGGGTACTGGCCAGTTACT
3841 GTTCAGCGTTGTTCATCAACCAACTCAGGCTCAGCGATGCTGGGCAGTATCTCTGCCAGGCTGGGGATGATTCCAATAGTA
3921 ATAAGAAGAATGCTGACCTCCAAGTGCTAAAGCCCGAGCCCGAGCTGGTTTATGAAGACCTGAGGGGCTCAGTGACCTTC
4001 CACTGTGCCCTGGGCCCTGAGGTGGCAAACGTGGCCAAATTTCTGTGCCGACAGAGCAGTGGGGAAACTGTGACGTGGT
4081 CGTCAACACCCTGGGGAAGAGGGCCCCAGCCTTTGAGGGCAGGATCCTGTCTCAACCCCCAGGACAAGGATGGCTCATTCA
4161 GTGTGGTGTATCACAGGCCTGAGGAAGGAGGATGCAGGGCGCTACCTGTGTGGAGCCCATTCGGATGGTCAGCTGCAGGAA
4241 GGCTCGCCTATCCAGGCCTGGCAACTCTTCGTCAATGAGGAGTCCACGATTCCCCGAGCCCCACTGTGGTGAAGGGGGT
4321 GGCAGGAAGCTCTGTGGCCGTGCTCTGCCCTTACAACCGTAAGGAAAGCAAAAGCATCAAGTACTGGTGTCTCTGGGAAG
4401 GGGCCCAGAATGGCCGCTGCCCCCTGCTGGTGGACAGCGAGGGGTGGGTAAAGGCCAGTACGAGGGCCGCTCTCCCTG
4481 CTGGAGGAGCCAGGCAACGGCACCTTCACTGTCTCTCAACCAGCTCACCAGCCGGGACGCCGGCTTCTACTGGTGTCT
4561 GACCAACGGCGATACTCTCTGGAGGACCACCGTGGAGATCAAGATTATCGAAGGAGAACCAAACCTCAAGGTTCCCGGGA
4641 ATGTCACGGCTGTGCTGGGAGAGACTCTCAAGGTCCCCTGTCACTTTCCATGCAAATTTCTCCTCGTACGAGAAATACTGG
4721 TGCAAGTGAATAACACGGGCTGCCAGGCCCTGCCAGCCAAGACGAAGGCCCCAGCAAGGCCTTCGTGAAGTGTGACGA
4801 GAACAGCCGGCTTGTCTCCCTGACCCTGAACCTGGTGACCAGGGCTGATGAGGGCTGGTACTGGTGTGGAGTGAAGCAGG
4881 GCCACTTCTATGGAGAGACTGCAGCCGTCTATGTGGCAGTTGAAGAGAGGAAGGCAGCGGGTCCCGCGATGTCAGCCTA
4961 GCGAAGGCAGACGCTGCTCCTGATGAGAAGGTGCTAGACTCTGGTTTTTCGGGAGATTGAGAACAAGCCATTACAGATCC
5041 CAGGCTTTTTGTCAGAGTGAATTCGTTTCGTATCATCGGTTTCGACAACGTTTCGTCAAGTTCAATGCATCAGTTTCATTGCG
5121 CACACACCAGAATCCTACTGAGTTCGAGTATTATGGCATTGGGAAAACCTGTTTTTCTGTACCATTGTTGTGCTTGTA
5201 TTTACTGTGTTTTTTATTCGGTTTTTCGCTATCGAAGTGTGAAATGGAAATGGATGGAGAAGAGTTAATGAATGATATGGT
5281 CCTTTTGTTCATTCTCAAATTAATATTATTTGTTTTTCTCTTATTTGTTGTGTGTTGAATTTGAAATTATAAGAGATAT
5361 GCAAACATTTTGTGTTTGTAGTAAAAATGTGTCAAATCGTGGCCTCTAATGACCGAAGTTAATATGAGGAGTAAACACTTG
5441 TAGTTGTCGACGGTATCGATATTAATTTCCCGATCCTATCTGTCACTTCATCAAAAGGACAGTAGAAAAGGAAGGTGGCAC
5521 CTACAAATGCCATCATTGCGATAAAGGAAAGGCTATCATTCAAGATGCCTCTGCCGACAGTGGTCCCAAAGATGGACCCC
5601 CACCCACGAGGAGCATCGTGGAAGAAAGACGTTCCAACCACGTCTTCAAAGCAAGTGGATTGATGTGATATCTCCACT
5681 GACGTAAGGGATGACGCACAATCCCACTATCCTTCGCAAGACCCTTCCTCTATATAAGGAAGTTCATTTCAATTTGGAGAG
5761 GACACGCTGAAATCACCAGTCTCTCTCTAGAGTACCATGGAGAACCATTGCTTTTTCTGGGGAGTCTGGCGGTTTTTAT
5841 TAAGGCTGTTTCATGTGAAAGCCCAAGAAGATGAAAGGATTGTTCTTGTGACAACAAATGTAAGTGTGCCCGGATTACTT

5921 CCAGGATCATCCGTTCTTCCGAAGATCCTAATGAGGA.CATTGTGGAGAGAAACATCCGAATTATTGTTCCCTCTGAACAAC
6001 AGGGAGAAATATCTCTGATCCACCTCACCATTGAGAACCAGATTTGTGTACCATTTGTCTGACCTCTGTAAAAAATGTGA
6081 TCCTACAGAAGTGGAGCTGGATAATCAGATAGTTACTGCTACCCAGAGCAATATCTGTGATGAAGACAGTGCACAGAGA
6161 CCTGCTACACTTATGACAGAAACAAGTGCTACACAGCTGTGGTCCCACTCGTATATGGTGGTGAGACCAAAATGGTGGAA
6241 ACAGCCTTAACCCAGATGCCTGCTATCCTGACTGAATCCGCGGCGATGAGCTAAGCTAGCTATATCATCAATTTATGTA
6321 TTACACATAATATCGCACTCAGTCTTTCATCTACGGCAATGTACCAGCTGATATAATCAGTTATTGAAATATTTCTGAAT
6401 TTAACTTGCATCAATAAAATTTATGTTTTTGGCTTGGACTATAATACCTGACTTGTTATTTTATCAATAAATATTTAACT
6481 ATATTTCTTTCAAGAGCTCAAATTTGGATTTGTAATAATAAAACGCAATTGTTTGTATTGTGGCGCTCTATCATAGATG
6561 TCGCTATAAACCTATTTCAGCACAAATATATTGTTTTTCATTTTAATATTGTACATATAAGTAGTAGGGTACAATCAGTAAAT
6641 TGAACGGAGAATATTATTTCATAAAAAATACGATAGTAACGGGTGATATATTTCATTAGAATGAACCGAAACCGGCGGTAAGG
6721 ATCTGAGCTACACATGCTCAGGTTTTTTACAACGTGCACAACAGAATTGAAAGCAAATATCATGCGATCATAGGCGTCTC
6801 GCATATCTCATTAAGCAGTGAATTCAGATCGGCTGAGTGGCTCCTTCAACGTTGCGGTTCTGTGAGTTCCAAACGTAAA
6881 ACGGCTTGTCCCGCGTCATCGGCGGGGTCATAACGTGACTCCCTTAATTCTCCGCTCATGATCAGATTGTGTTTTCCCGC
6961 CTTTCAGTTTAACTATCAGTGTGTTGACAGGATATATTGGCGGGTAAACCTAAGAGAAAAGAGCGTTTATTAGAATAATCG
7041 GATATTTAAAGGGCGTGAAAAGGTTTATCCGTTTCGTCCATTTGTATGTGCATGCCAACACAGGTTCCCCAGATCTGGC
7121 GCCGGCCAG

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